

REMARKS

The Examiner maintains the rejection of claims 1-14 under 35 U.S.C. 102(b) as being anticipated by Taniguchi, and of claims 15-22 under 35 U.S.C. 103(a) as being unpatentable further in view of Kaneko. In response to Applicant's prior arguments, the Examiner merely disagrees, asserting that Taniguchi does provide a measure that is used to facilitate other functions in the invention without really pointing out specific flaws in Applicant's arguments.

Applicant's claimed invention is an apparatus and method for analyzing a transport stream for a compressed video signal, such as an MPEG compressed signal. An information element, such as PAT, PMT, SDT, etc., is extracted from the transport stream and, based upon the extracted information element, a message of a predetermined type is generated. A priority is assigned to the message according to a predetermined criticality of the message to the integrity of the compressed video signal. The message is added to a message queue if the assigned priority is equal to or greater than a variable threshold priority, or is otherwise discarded. The variable threshold priority may be adjusted according to the size of the message queue to keep it within a predetermined range. Each message in the message queue is analyzed in time sequence.

In contradistinction to Applicant's claimed invention Taniguchi discloses a system for providing dynamic adjustment of a transmission rate of an encoded stream while maintaining the highest quality attainable, rather than for analyzing the encoded stream. Load variations downstream are monitored, and fed back upstream to control the transmission rate through automatic discarding of data parts (not *messages*) with a lower priority. In response to the fed back parameter, a stream shaping process is performed to discard data parts with lower priority to decrease the data volume, i.e., transmission rate. Specifically Taniguchi has a transmission node 11, a relay node 12 and a reception node 13 coupled to a computer network 14. The transmission node has a data accumulation device 111, a stream sending device 112 and a stream transfer device 20; the relay mode just has a stream transfer device; and the reception node has a stream transfer device that includes a QoS controller 125, a stream decoding and reproducing device 132 and a display device 133. A user may interface with the reception node stream transfer device via a setting and operation section 131. The stream transfer device at the reception node has a communication interface section 26 for interacting with the setting and operation section at one node 262 and with the computer network at another node 261. The stream from the network via the communication interface section is input to a stream reception

section 21 and then to a stream conversion section 23 for stream shaping by “annulling packets” of low priority determined from a priority table controlled by a user. The converted stream from the stream conversion section goes to a stream transmission section 22 and then to the stream decoding and reproducing device. A communication controller 24 interacts with the communication interface section, the stream reception and transmission sections, the stream conversion section and the QoS controller. The stream reception section measures a data reception volume, which measurement is provided to the QoS controller as a QoS state message regarding an effective reception rate. The QoS controller has a receiving and analyzing section 251 that analyzes the QoS state messages, which section has a queue structure buffer that stores the messages in order of reception and analyzes the messages in like order. The transmission rate is adjusted to be within a specified range by dropping low priority packets below a priority threshold.

Applicant reiterates the argument that Taniguchi does not “extract an information element from the transport stream”, as it appears that Taniguchi in the stream reception section merely determines a measured data volume. The Examiner does not explicitly dispute this by pointing to the specific “information element” that is “extracted” in Taniguchi. Taniguchi performs a data volume measurement, and does *not* extract an information element. Applicant then recites that a message “of a predetermined type” is generated from the information element. Taniguchi generates a message related to the data volume as it relates to the desired quality of service, but not one generated from “an information element.” The message recited by Applicant is added to a message queue only if the priority of the message is greater than the variable priority threshold, whereas Taniguchi adds all the messages from the stream reception section to the message queue in the receiving and analyzing section. Then Applicant adjusts the size of the message queue as a function of the variable priority level, whereas Taniguchi adjusts the stream data as a function of the load state and set transmission rate. Thus claims 1 and 8, together with dependent claims 2-7 and 9-14, are deemed to be allowable as being neither anticipated nor rendered obvious to one of ordinary skill in the art by Taniguchi as Taniguchi does not teach any of the element recited by Applicant.

Applicant further recites in claims 4 and 10 the additional elements of registering which predetermined messages are processed by which ones “of a plurality of analyzer modules.” The Examiner does not point out in Taniguchi what corresponds to “a plurality of analyzer modules”,

and the messages of Taniguchi are all processed by a single computer. The Examiner needs to point out in the cited portions of Taniguchi to which he refers what elements correspond to the elements recited by Applicant. Applicant submits that there are no such corresponding elements. Therefore for these additional reasons claims 4 and 10, together with claims 5 and 11 dependent therefrom, are deemed to be allowable as being neither anticipated nor rendered obvious to one of ordinary skill in the art by Taniguchi.

With regards to Kaneko, the Examiner states that it is in the same field of endeavor. However Kaneko is directed toward inserting an electronic program guide into the audio/video transmission and is not at all involved in “monitoring a transport stream of a compressed video signal” as recited by Applicant. Therefore Kaneko does not identify “from any messages in the message queue a program association table” as recited by Applicant as Kaneko is concerned with generating information for insertion into the transmission rather than monitoring the transmission stream for analysis. Thus claims 15-22 also are deemed to be allowable as depending from other claims deemed to be allowable and as being nonobvious to one of ordinary skill in the art over Taniguchi in view of Kaneko.

In view of the foregoing remarks allowance of claims 1-22 is urged, and such action and the issuance of this case are requested.

Respectfully submitted,
Matthew Towler

By: /Matthew D. Rabdau/
Matthew D. Rabdau
Reg. No. 43,026
Attorney for Applicant

TEKTRONIX, INC.
P.O. Box 500 (50-LAW)
Beaverton, OR 97077
(503) 627-5068
7443 US